NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

May 31, 2017

Attachment 1 - Flight Crew Interview Summaries

OPERATIONAL FACTORS/HUMAN PERFORMANCE

DCA17FA021

Interviewee: Anthony Paul Kochenash
Date: November 4, 2016
Time: 1103 EDT[1]

Via Teleconference: Dr. Katherine Wilson, Shawn Etcher – NTSB; Matthew Rigsby – Federal Aviation Administration; Captain Chris Moran – American Airlines; Captain John Deleeuw – Allied Pilots Association.

Captain Kochenash was represented by Mr. Ray J. Duke – Attorney – Allied Pilots Association

During the interview, Captain Kochenash stated the following:

He was 61 years old. He was a B767 captain for American Airlines.

He was hired by TWA[2] in January 1986 and then, following the acquisition, became an American Airlines pilot about April 2001.

He was based in Miami and was a line pilot.

He had an Airline Transport Pilot Certificate with type ratings in the B-707[3], B-727, B-757[4], B-767, DC-9[5], N-265[6]. He was also a flight engineer for 6 years, and had a glider pilot license. He had never been a check airman or instructor.

He had approximately 17,400 total hours of flight experience and about 4,000 hours of flight experience in the B767. He was a First Officer in the B767 from 1995 to 1999 and now had about 1,500 hours as a captain in the B767. He became a captain on the B767 in January of 2014.

He currently had a first-class Federal Aviation Administration (FAA) medical certificate at the time of the accident which was issued on May 4, 2016. He did not have any limitations on that medical certificate. He further provided that a few days prior to the interview he obtained another first–class medical certificate.

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[1] Eastern Daylight Time
[2] Trans World Airlines which was acquired by AMR Corp., which is the parent company of American Airlines, in April 2001
[3] The Boeing Company, 707-100 Long Body, 707-100B Long Body, 707-100B Short Body, 707-200, 707-300, 707-300B, 707-300C, 707-400, 720 Series, 720B series and includes military designators KC-135 (all variants), C-135, C-18B, E3-A/B/C, E6-A/B, E-8C, EC-18B, EC-18D, VC-137. Source FAA Order 8900.1, Figure 5-88.
[4] The Boeing Company, B757-200, B-757-300, B767-200, B767-300, B767-400ER. Source FAA Order 8900.1, Figure 5-88
[5] The Boeing Company, DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32 DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, DC-9-41, DC-9-51, DC-9-81, DC-9-82, DC-9-83, DC-9-87, MD-88, MD-90-30, 717-200. Source FAA Order 8900.1, Figure 5-88
[6] Saberliner Aviation, LLC, NA-265, NA-265-20. NA-265-30, NA-265-40, NA-265-60, NA-265-65, NA-265-70, NA-265-80 and includes military designators T-39A, CT-39A, NT-39A, T-39B, T-39D, CT-39E, T-39G, CT-39G, T-39N. Source FAA Order 8900.1, Figure 5-88.

He was the pilot flying on the accident flight.

He had not had any accidents or incidents while flying at the airlines, other than having had some system failures which required them to declare an emergency.

When asked to provide a brief history of his flying career he stated that he started flying in 1973 and flew enough during that year to obtain his private pilot certificate in February of 1974. He finished college in 1977, continued with his pilot training in 1978 in the US Air Force and was assigned to the KC135, based in Grand Forks, North Dakota. He flew the KC135 for about 1,000 flight hours. He then transitioned to the T39 which was based at McClellan AFB in Sacramento, California, for about a year and a half, which he flew for about 600 flight hours. He was hired at TWA in 1986 and flew as an engineer for 3 years on the B727 and 3 years as an engineer on the L-1011. He then upgraded to first officer on the B727. In 1995, he flew as a first officer on the B767. In 1999 he upgraded to captain on the MD80. In 2000 he flew for a few months on the B767 as a captain and subsequently returned to captain on the MD80 in 2001. In 2014 he upgraded to captain again on the B767 in Miami.

He had never been terminated by any of his employers.

When asked to describe his chain of command at American Airlines, he stated that he reported to the chief pilot in Miami.

When asked about pilot staffing at American Airlines, he stated that they have an "abundance" of pilots in Miami. He estimated that there were about 80 captains based on the B767 in Miami and they had about 40 sequences of flying lines. He had held no other job, except pilot, at American Airlines.

When asked if American Airlines had ASAP[7] or FOQA[8] he stated that they did. He further stated that they were a great way for a pilot to describe an event and to "not be held accountable" which he further described as not having their certificates in jeopardy with the FAA. At American Airlines he went through training every 9 months and they had a section where they discussed human factors, during that session was where they discussed cases from ASAP and FOQA.

He did not communicate with the dispatcher prior to their departure. Their departure was at 1420 CDT[9] and he thought that was very close to on schedule. He thought the event occurred about 15 minutes after they departed the gate.

When he arrived at the airplane, maintenance was on board working on a broken seat at 7J. He further stated that there was nothing out of normal with the airplane.

He described the taxi out as "completely normal" and that there was no one seated on the cockpit jumpseat. He further reported that he had flown with the first officer on a trip earlier in the month and they had flown together several times.

[7] Aviation Safety Action Program. Source: https://www.faa.gov/about/initiatives/asap/
[8] Flight Operations Control Assurance: Source FAA Advisory Circular AC 120-82
[9] Central Daylight Time

When asked if he could remember their V-speeds or the weight, he stated that he could not recall the V-speed but their weight was about 300,000 or 301,000 pounds. During the takeoff roll about 2 to 3 seconds after the 80 knot callout from the first officer the engine came apart and it took him about another 2-3 seconds to decide to abort. He estimated that the speed may have been around 110 knots when he initiated the abort.

When asked to describe the event he stated that the taxi out was "very fast' as there were several airplanes in front of them but the air traffic controllers were departing flights "quickly. They were cleared to line up and wait on runway 28R at taxiway intersection "November 5" and subsequently given a takeoff clearance with a heading assigned. They pushed the throttles forward and engaged the auto thrust and he classified it as a "normal spool up." At the 80 knot callout he looked at the airspeed, which showed exactly 80 knots and a few seconds later he heard a "ka-boom" and felt a slight pressure bump. He described it as "running over a pothole at 100 knots." He further stated that the airplane shook and he thought it felt as though it leaned to the right. Later it did not appear that they had blown any of the tires. During the rejected takeoff he attempted to maintain the centerline of the runway. Once he realized that it was the engine, he rejected the takeoff. He further stated that the airplane was equipped with a rejected takeoff autobraking system and it performed an "aggressive stop." After the system began braking, the airplane stopped about 10 seconds later and he estimated that they had traveled about 1,500 feet from the time when they began the rejected takeoff. After they had stopped there was no fire indication. As soon as they began the reject, the first officer announced to the air traffic controller that they were stopping on the runway. He further recalled hearing the controller state "roger roger fire." Once they had stopped the airplane was when they first received the fire indication and the fire bell. He then commanded the engine fire checklist. The checklist has some memory items and it was involved, so he determined, that since they were on the ground, he would shut down the engine. After he shut off the fuel switch for the right engine the first officer pulled the right fire T-handle and then rotated the T-handle in order to discharge one of the fire bottles into the right engine. After which time they began to run the evacuation checklist, which he described as "slow and cumbersome." He further stated it was like a "catch-all checklist," as a large portion of the checklist was to depressurize the airplane, and that part felt like it took a long time. He could hear a commotion behind them, outside the cockpit door, and at that time the left engine was still operating. He said he had the presence of mind to realize they were evacuating. When they got to the point in the checklist, they shut down the left engine, finished the evacuation checklist, and then exited the cockpit. As they exited the cockpit they were met by one of the flight attendants who informed them that everyone was out of the airplane and they needed to get out. He could see the thick black smoke and could not see more than about 2 feet. The flight attendant assured them everyone was out and they all evacuated the airplane.

When asked how he shut down the engine, he stated he utilized the fuel cut off switch.

When asked if they received the fire light or fire bell first, he stated that they were simultaneous.

He stated that as soon as the event happened the airplane began drifting off of the centerline. When asked if he could recall the speed he stated that he did not look inside during the rejected takeoff.

When asked for a clarification on the "cumbersome" portion of the evacuation checklist, he explained that it took at least one minute to go through the checklist. They had to make sure the airplane was depressurized. The airplane pressurizes to about 0.8 differential during takeoff; which was a small amount of pressure that it did not hamper the evacuation. He could understand, at night, the need to leave one engine running for the lights, then announce over the PA to evacuate and do the evacuation alarm.

When asked how they are trained to conduct an emergency evacuation, he stated that they were trained by running the checklist and then get out of the cockpit. He was to go through the cabin to make sure all of the passengers and crew had deplaned, and then go down a slide. He felt that had he had the presence of mind to remember, he could have grabbed the paperwork, which included the number of passengers. Once outside the airplane, they were to assist with the evacuation. Completing the checklists took them "so long" that after he and the first officer exited the cockpit the number 1 flight attendant was telling them that the passengers were off and that they need to get off the airplane.

When asked if he was trained to take any of the emergency equipment with him from the cockpit, he stated that he thought he was trained to grab the fire extinguisher that was in the cockpit but he could not recall for certain. He further stated that it would be a good idea to take the equipment with him.

When asked how the crew was able to account for the all of the passengers, he stated that he contacted the company via dispatch, as that was the number he had in his phone at the time, in order to obtain an accurate passenger count. He had called the company after the fire department arrived and requested a passenger count. He also stated that the flight attendants had a "close out sheet" provided to them by the gate agent prior to pushback.

When asked what he observed after he exited the airplane he stated that he noticed the passengers going across the grass towards taxiway "papa" and that was about the time the fire department began to arrive. He also noticed that the flight attendants were helping guide passengers away from the airplane and he estimated that at that point the passengers were a safe distance away, about 300 yards away from the airplane. He and the first officer stayed closer to the airplane.

When asked what was the normal procedures that he was required to do when performing an evacuation, he stated that he would normally walk through the cabin to verify all of the occupants were off the airplane; however, when he exited the cockpit and the number 1 flight attendant was "screaming" at them that all of the passengers were off the airplane. He further stated that he was probably supposed to exit out of one of the aft doors of the airplane. He recalled that due to the smoke in the cabin he could not see the first class cabin from the cockpit door. He further stated that he was not sure why it was so smoky in the cabin. He had elected to bypass the walk through of the cabin since the number 1 flight attendant informed him that the cabin had been evacuated.

When asked to describe the engine fire checklist he stated that it was the first checklist they started and that the first step was to disengage the auto throttles, which had already been done since the throttles were in the idle position. The next step was to move the fuel switch to the cutoff position, which he said he had done that. As they were coming to a stop, around 20 to 30 knots, he recalled seeing the red light come on, which was the reason he utilized the fuel cutoff switch for the right engine. He recalled seeing the first officer grab the fire switch handle, for the right engine, pull it, and rotate the handle, in at least one direction, to discharge the bottle into the engine. At that point he determined to conduct the evacuation checklist, since they were on the ground. After they had shutdown both engines he made the PA announcement to evacuate, turned on the evacuation switch, and the first officer notified the air traffic control tower. He further stated that they did not need to pull the fire handle for the APU[10] as it was not running and that they only pulled the fire handles for the left and right engines. After they pulled both fire handles, they rotated the right engine fire handle in both directions in order to discharge the fire bottles into the right engine.

When asked if he considered the training he received for evacuations was adequate, he stated that they conducted the training during their simulator training event but he felt it was "glossed over;" it was conducted every 9 months. He thought it should be treated more as an event rather than a simulator scenario. The training was usually incorporated with another scenario such as an event that occurred in flight and the evacuation was conducted following the landing. He further stated that most of the evacuation training was conducted after landing but they may have done some evacuation training as part of a takeoff scenario; however, he could not recall for sure.

When asked if he was able to determine that there had been an engine failure, he stated that prior to him knowing it was an engine problem he was focused outside attempting to maintain the centerline during the rejected takeoff. He further explained that prior to him thinking it was an engine issue, it seemed like there was a "massive explosion" and he felt that the airplane was not safe to go into the air. Prior to the event everything was "totally normal."

When asked how many passengers he recalled on the flight, he stated he knew it was about 100 or more; however, when he contacted the company they informed him there should have been 170 people on board. Before he reported that number to the fire department, the firefighters confirmed that all of the occupants were off the airplane by going on board the airplane. He was not sure if the flight attendants were counting the passengers.

When asked if there was a procedure for the flight attendants to verify that the passengers were off the airplane, he stated he was not sure. He further stated that he thought there was no official procedure and that it was the flight attendants job to "round them [passengers] up and count them." He recalled seeing the passengers about 300 yards away from him when the fire department arrived.

Following the event he was tested for drugs and alcohol by providing a urine sample and by breathalyzer.

[10] Auxiliary Power Unit

When asked if there was anything available to them on board to be able to go through the smoke verifying all of the occupants were off and he reported that there is a PBE[11] located in the cockpit that they could utilize to go through the smoke. He further stated that he did not grab any of the emergency equipment when he exited the cockpit. After they completed the evacuation checklist they opened the cockpit door to see what it looked like in the cabin when the number 1 flight attendant reported that everyone was off the airplane. He determined that searching the cabin was moot at that point.

When asked if he could describe the human factors course that the airline provided during recurrent training, he reported that it usually covered FOQA trends and ASAP data. The airline discussed past events and went over what went right and/or what went wrong and suggested improvements to pilots in case it was to happen again. The airline also discussed fatigue and error management.

When asked to describe the 72-hours preceding the event he stated that he had flown a 3-day trip starting on the 24th and concluding on the 26th about 1830 EDT. He started the accident trip on the 27th about 1600 EDT at his base in Miami. That day had one leg scheduled which was to fly from Miami to Chicago, which they did, and finished about 1930 CDT. He further stated that he felt well rested and on the day of the accident they left the hotel about 1230 CDT following their 18-hour layover.

When asked to describe his activities in the 3 days prior to the event, he said he was on a 3-day trip that began on the 24th. It started in Miami at 1726 EDT and they arrived in New York about 2030 which was followed by a deadhead flight to Boston, that arrived about midnight. By the time he got to the hotel, he went to bed around 0100 to 0130 EDT. On the 25th he left the hotel about 1330 EDT for a departure time of 1500 EDT. He probably woke up about 0900 to 1000. From Boston he flew to Philadelphia, then deadheaded to Charlotte. After that he flew from Charlotte to New York. He arrived in New York about midnight and was in bed about 0100 EDT. On the 26th they left the hotel about 1400 to 1430 EDT for a flight to Miami that departed about 1540 EDT. That flight arrived in Miami about 1830 EDT. He felt that it was an "easy day" with only one leg to operate. He further stated that although he got to bed late every night, he obtained about 7 to 8 hours of sleep each night.

When asked about where he stayed in Miami between his trips, he stated that he shared a condo in Miami, and that he was in the condo about 21 hours between the trips and that the condominium was about a 25-minute ride from the airport. He woke up on the 27th about 0900 EDT. He started the accident trip on the 27th about 1650 EDT which was a flight from Miami to Chicago and they arrived at the hotel between 1930 and 2000 CDT. He then went to get something to eat and was back in his room and used his computer until about midnight. On the 28th, the day of the accident, he woke up about 0800 to 0900 CDT and they departed the hotel about 1235 CDT. The accident flight was scheduled to depart at 1420 CDT.

When asked if he had any problems falling asleep he stated that he did not have any problems with falling and staying asleep. Some nights he may be awoken for physiological needs; however, could not recall if that occurred the nights prior to the accident. He further stated that

[11] Personal Breathing Equipment

when he wakes up he feels rested and that he felt rested on the day of the accident. He thought the crew was "in good shape that day."

When asked to describe his normal sleep pattern on his days off, he stated that he tried to get to bed between 2300 and midnight and then up around 0700.

When asked to describe his previous 30-days of flying he stated he flew more in October than any other month as he had "a lot" of credit time due to the deadheads. He estimated he flew about 60 hours but received about 100 hours of pay.

He had never seen nor been diagnosed by a doctor for any sleep disorder.

He had no changes in his health (good or bad) in the last 12 months and he stated his financial situation was getting better. There had been no changes in his personal life (good or bad) and that he had been divorced for about 15 to 16 years. He further considered his health as "pretty good." There were no vision limitations on his FAA medical and he had no issues with color vision. He had the "normal" amount of hearing loss for flying jets but it did not require hearing aids.

When asked if he took any prescription medication he stated that he did sometimes and he had disclosed those medications on his medical application. He further stated that there were no side effects from the prescription medication. He also would take vitamins, supplements, and had taken ibuprofen once in a while. He had taken nothing in the preceding 72-hours that would have given him any performance issues.

When asked if he consumed alcohol, he stated that he did sometimes and that the most recent was the night of the 27th when he had a couple of beers with dinner.

He does not use any tobacco products or illicit drugs.

When asked how much of the evacuation checklist they accomplished, he stated it was "cumbersome" and that they had completed through step 9, which he further stated was the entire checklist. The last few items of the checklist required him to command an evacuation, press the evacuation button, and notify air traffic control. Following that, they pulled the left fire handle and rotated the handle for the right engine in both directions. He had shut the engine down prior to commanding the checklist.

When asked how much flying he accomplished for the month of October he stated he had 60 hours of flying which was about 56 hours of actual flight time. He had a lot of credit time in his trips since he only flew one leg on some of the days.

When asked what was their schedule had they flown the accident flight to Miami, he stated that there were to return to Chicago for another overnight. His duty day on the day of the accident started with the pickup time of 1235 CDT.

When asked if there was any concern over the checklist, he stated that maybe more options for checklist would help as the way the checklist was designed was a "one size fits all." His most

recent rejected takeoff was in March during his simulator training. That was part of his annual training and occasionally they exercised the evacuation checklist.

When asked if there were any fire indications in the cockpit, he stated there were and the indications specified the right engine. He elaborated that the fuel control switch had red stripes that light up which was the fire warning as well as a fire bell. They utilized a paper checklist in the cockpit and they also had checklists on their iPads. During the event, the first officer had grabbed his paper checklist.

When asked if he had heard any chime from the flight attendants, he stated no he had not. He further stated that after the event the flight attendants reported to him that they had tried to contact the cockpit; however, with the fire bell he did not hear them attempt to call.

He stated that the first officer was reading the checklist.

When asked to describe how he would call for the evacuation, he stated that he would make a PA first then activate the evacuation command switch.

When asked if he had ever experienced a blown tire prior to the event, he stated that he had in the simulator only and during the event the airplane felt as though it had titled some and was dragging to the right. He felt that the sensation was similar to having blown a tire. He did not immediately think they had an engine failure.

When asked to describe the first officer on the day of the accident, he stated that he was "totally normal, happy." He had flown with the first officer before and he observed nothing out of the ordinary. He had never had any problems with the first officer. He further described the first officer as the "most mild mannered" co-pilot and easy to get along. He never heard of nor would think there would be anyone that would have problems with the first officer. The first officer was very positive and had a friendly personality.

When asked if there was anything he could recall that may need to be improved, he stated that the biggest thing he could think of was that neither he nor the first officer called the engine failure. He learned from videos of the evacuation that the left engine was still running when the flight attendants popped the slides. Had he had the situation awareness when he heard the commotion, he would have shut down the left engine sooner.

When asked if a camera showing the exterior of the airplane would have helped them with their situational awareness of what was occurring outside, he stated that it would have. He further explained that from the cockpit they could not see their wings or the engines. Had they been able to assess the situation it may have changed their decision, especially if they would have known how large the fire was. He also stated that the front flight attendants could not see the engines either, even though they were to assess the situation before opening the doors. After they came to a stop, the front flight attendants, when they began the evacuation, had opened the R1 door and deployed the slide. However, since the fire was right there they blocked the exit and redirected the passengers. In the cockpit, they did not receive any fire indications at first as the fire loops were located in the engine cowls and the fire was "outside" the engine.

When asked if calling the dispatcher in order to obtain the passenger count delayed the information, he stated that it took several minutes to get the passenger count.

He did not have anything else to add to the interview.

The interview ended at 1240 EDT.

Interviewee: David Travis Ditzel
Date: November 4, 2016
Time: 1252 EDT

Via Telephone: Katherine Wilson, Shawn Etcher – NTSB; Matt Rigsby – FAA, Chris Moran – American Airlines; John Deleeuw – Allied Pilots Association

First Officer Ditzel was represented by Mr. Ray J. Duke – Attorney - Allied Pilots Association

During the interview the First Officer (FO) stated the following:

He came from an airline family. His father was with PanAm and was the chief pilot there. American Airlines was FO Ditzel's fifth airline. He considered himself as an "old" guy in the right seat. He has been a captain and check airman at other airlines. He started in the Dash 7[12] and then flew the ATR-72[13] for PanAm Express, which later became Trans World Express. He was a captain and check airman on the ATR and the Dash 7. He then became a flight engineer on the B727 as well as a check engineer at TWA. Then he became a FO on the MD80. He was subsequently furloughed, was hired at Atlantic Southeast Airlines (ASA) as an FO and then became a captain flying the CL-65[14].

He was 57 years old

He was an FO on the Boeing 767 and based in Miami. He was a line pilot.

His date of hire with TWA was December 15, 1995, and then became an American Airlines pilot following the completion of the merger about May 1, 2001. He was first furloughed in July of 2003 when he went to ASA and was recalled from furlough in March of 2008. His second furlough from American Airlines was February of 2010 and he was recalled from furlough in December 2010.

He had an Airline Transport Pilot certificate with ratings for instrument, glider and a flight engineer certificate. He had type ratings in the DHC-7, ATR-42, CRJ-200.

[12] Originally manufactured by de Havilland Canada and currently the certificate is held by Viking Air. Source: http://www.vikingair.com/viking-aircraft/dhc-7-dash-7
[13] Manufactured by Aérospatiale, France. Source FAA Order 8900.1, Figure 5-88.
[14] Bombardier Inc. CL-600-2B19, CL-600-2C10, CL-600-2D24, CL-600-2D15. Source FAA Order 8900.1, Figure 5-88.

He has about 22,000 hours of total flight experience of which about 1,600 of those hours were in the B767 aircraft. In October 2016 he flew about 75 hours.

He had a first-class medical certificate from the Federal Aviation Administration (FAA), with the limitation of: the holder shall possess glasses for near and intermediate vision. His most recent medical certificate was issued May 3, 2016.

He was the pilot monitoring for the accident flight.

He had never been terminated from any of his previous employers. He had never had any previous accidents or incidents.

He considered his chain of command as he was the number 2 on the airplane and reported to the captain. If he had a problem or concern with another pilot, he could utilize the Allied Pilots Association's (APA) professional standards group. He normally would address any problems himself; however, if he could not fix the problem or concern he would talk to the captain then maybe have someone else get involved.

He felt that American Airlines was "pretty well staffed" when it came to pilot staffing. He further stated that they had a lot of pilots on reserve. He was not concerned with being furloughed.

American Airlines had an ASAP and FOQA program. He felt that the ASAP program provided pilots the opportunity to "fess up" when they made a mistake, and he felt that it was in everyone's best interest. He stated that it was a "fantastic program" which also provided protection for pilots from any potential certificate action. The FOQA program was a way to "keep an eye on what the pilots are really doing." The company shared the information anonymously in order for pilots to learn from other events.

When asked how pilots were able to obtain the information to learn from the various programs, he stated that APA had a site they could go to; however, he did not go there too often. If he went to the site, he could find out information about specific equipment events and provided an example of exceeding the flaps maximum speed limits on the B757. He said it "is a slippery airplane." He further clarified that he thought it was the APA site but he was not certain.

When asked to describe the events leading up to and including the event, he stated that he had "plenty of rest" and that they had a "long overnight" in Chicago. He arrived at the airplane more than an hour prior to departure. When he went on board the airplane he talked to the mechanics, who were doing minor things. He then met the cabin crew and classified them as "upbeat." The flight left on time and the taxi was unrushed and uneventful. He classified the takeoff as "unrushed." Following the 80 knot airspeed call out, he heard a "bang or pop" and thought "what is that." The next thing he noticed was the captain was rejecting the takeoff roll. He found out after the accident that he called tower and told them that they were stopping on the runway and to have the "trucks come out." He recalled the air traffic controller telling them that their right engine was on fire. The captain commanded the engine fire checklist and then interrupted that checklist and commanded to shut down the engine. He [FO] pulled the fire handle and rotated it

to discharge a bottle into the engine. They then conducted the evacuation checklist. He could hear shouting but he recalled that it was nothing specific. He pulled out the evacuation checklist and went through each item as the captain commanded the evacuation. After they completed the checklist they proceeded to evacuate the airplane. He was surprised that one of the flight attendants reported that the airplane had been evacuated, that the airplane was clear, and to exit the airplane. He remembered a great deal of smoke on the airplane and he was "glad" the captain did not have to go back through the cabin looking for any remaining passengers. He exited the airplane, followed by the flight attendant, and then the captain. After they exited they walked away from the airplane.

When asked if he could recall what the mechanics were doing on the airplane when he arrived at the airplane, he reported that they were "doing minor items." He provided an example of one of the items stating that one of the seats would not retract from the recline position and another item was with a tray table. He could not recall if there were any deferrals but classified the airplane as a "clean" airplane. He further stated that there was no abnormalities or issues with the airplane during their taxi out.

He recalled the taxi out was "short" for Chicago and that there were no delays. He further expanded on the statement and stated that they "never stopped the airplane." He recalled the fuel load that they had prior to departure was 42,200 pounds of fuel. He could not remember the gross takeoff weight nor any of the V-speeds.

He stated there were 161 passengers on board and that they were doing standard (reduced) thrust for takeoff and the assumed temperature was 57 degrees.

When asked if he observed the airspeed when he heard the "bang," he stated he had not. He further explained that it was about 2 seconds after he did the 80 knot call out. Following the "bang" and until the captain conducted the rejected takeoff there were no other sounds and no fire lights. Following the beginning of the rejected takeoff, he informed air traffic control that they were stopping. The controller responded that they had a fire on the right side and he stated that was their first indication of a bigger problem. He then recalled observing a fire light but at no time did he recall hearing the fire bell. He thought the captain said he heard the bell.

After the captain had first commanded the engine fire checklist he then commanded to shut down the engine. The captain shut down the right engine and he had pulled the T-handle and rotated the handle to discharge the fire bottle. He further described the event as "anti-climactic" in the cockpit, when compared to what was going on around them.

When asked what indications they had that it was the right engine he stated that the controller told them that their right engine was on fire.

When asked to describe what his role was in conducting the evacuation checklist, he stated that he was only required to get out the checklist, read the command, and the response. The captain conducted the action items. He felt that doing the evacuation checklist "went smoothly."

When asked to describe the shouting he heard, he stated that it was directly behind him, behind the cockpit. However, he further stated he did not know what was going on in the cabin at the time.

When asked to describe the events just prior to engine failure, he stated that it felt like "a little brake" in their direction off to the left and then there was a slight shake. It was anticlimactic compared to what was going on outside. He further stated that the cockpit was unaffected and they did not have any smoke, noise or increased temperature while in the cockpit. After the emergency checklist was accomplished he remembered that the noise was gone and felt there was nothing "unusual." When he opened the cockpit door and looked towards the back of the airplane he saw the flight attendant waiting for them and then observed "a lot of smoke."

When asked to describe his duties in an evacuation, he stated his job was to be the first one off the airplane in order to help evacuate the passengers away from the airplane. The captain was right behind him as they left the cockpit. He went down the slide first, followed by the one remaining flight attendant, and then the captain. Once they exited the airplane, and were on the ground, they saw the flames on the right side, which "surprised" them that it was not a small fire.

When asked how American Airlines trained pilots to conduct evacuations, he stated that pilots were trained in the simulator, through the checklist, and there were questions on the written examinations. During the simulator, pilots were given emergency after emergency in an effort to maintain pilot proficiency. During the simulator they usually would conduct a simulated evacuation either during a takeoff or landing. It was "similar" to what they had as an engine fire. As pilots, part of the simulation was to state what their duties were.

When asked what his specific duties were he stated that he was to keep the passengers away from the airplane by directing them away from it. As the FO he was to evacuate the airplane through the L1[15] door, and further stated that both pilots were to go out that door.

When asked if they were trained to grab any of the emergency equipment prior to leaving the cockpit he stated that they were not and were trained to exit the airplane and direct the evacuation.

When asked what emergency equipment they had available to them in the cockpit, he stated they had a fire extinguisher, PBE, a crash axe, and life vests.

When asked how they accounted for the passengers, he stated that they contacted their dispatcher who provided them with the number on board. He further provided that the load sheet was placed right ahead of the throttles, which contained the passenger count, and he wished he would have grabbed it and took it with him. He felt that both he and the captain should account for the passengers. He further stated that he or the captain was the first person the fire fighters encountered and they wanted a passenger count.

Once they were off the airplane, they moved away from it. He did talk to some of the passengers because they were "wide-eyed", even though he did not think he was supposed to, but he could

[15] The most forward cabin entry door on the left side of the airplane.

not recall what he said. He recalled that some of the passengers were asking if they were going to get to Miami that night and others asked when they would get their bags returned to them from inside the cabin. He stated that none of the questions asked were technical in nature.

When asked to clarify why he was not to talk to the passengers, he stated that he was not sure if it was an American Airlines policy or one of the companies he used to work for policy. However, he could see the passenger had a need for answers and he did not resist that need.

He provided a urine and breath sample for drug and alcohol screening, following the accident.

They knew they had some sort of a problem; however, for him, the first indication was from the air traffic control tower.

When asked if he agreed with the captain's decision to reject the takeoff, he stated he did.

When asked to describe the captain prior to the event, he stated that the captain seemed to be "sharp, well rested" and that the captain was his "normal talkative self." He further classified the captain as a "very sharp individual." He did not have any concerns with flying with the captain and they had flown together a couple of times. He had not heard of any other pilot having any concerns or issues with the accident captain.

He felt the training for events similar to this one was "adequate." However, he still regretted not grabbing the load sheet prior to leaving the cockpit and that it was not something that was emphasized. He thought it would be nice if pilots were told that.

When asked whose job it was to conduct a passenger head count he stated he thought it was the flight attendants' responsibility but he was not certain. He did not think it was the cockpit's job as their job was safety in order to get the passengers away from the airplane.

He stated that the he and the captain were informed by one of the flight attendants before they evacuated the airplane that the airplane was "clear" when asked about how they knew no one was left on board.

After they exited the airplane they did not see any of the flight attendants until later that day as the flight attendants were with the passengers a "good distance away."

When asked to describe his duties in performing the evacuation checklist he stated he was to read both the command and the response to the command that was on the checklist. He thought they finished the checklist. He and the captain left their iPads in the airplane; however, because they both wear their phones that was the only reason their phones were with them to contact dispatch.

When asked if he or the captain were Federal Flight Deck Officers (FFDO) he stated that he was not and he did not think the captain was either.

When asked if he remembered any bells from the flight attendants he stated that he did not remember a single bell sounding in the cockpit.

When asked who activated the evacuation button he stated the captain did.

When asked to clarify if he considered the chief pilot in his chain of command he stated that yes he would consider that, especially considering that his dad was a chief pilot.

When asked if he was aware of a monthly publication provided by American Airlines, APA, and with FAA oversight about other pilot's experience he stated he was and consider the publication "fantastic." They got to learn from other people's mistakes.

When asked how well he slept at night, he stated he usually slept about 7 hours per night and his habit was to go to bed early and wake up early. While at home he enjoyed helping other people repair their computers and the evening prior to the trip, as well as the morning on the first day of the trip, he was helping others with their computer repairs. If not at home, he would help people over the phone with their computers.

He did not recall his sleep-wake history in the three days before the accident. He thought that the first night of the trip they got into Chicago around 2100 but could not recall the exact time. When he arrived at his hotel room he did not think he stayed up long on his computer. He felt he had no problem sleeping or going to sleep and normally he did not have get up during the night for physiological needs.

He has never been diagnosed with any sleep disorder.

He felt well rested with the long overnight and prior to the flight he felt "ok." He further stated that it was a beautiful day, there was no traffic going to the airport so they arrived early and there was no rush whatsoever.

He classified himself as one that tends to work a lot and stated that October was going to be a really good month for him.

There had been no changes in his health (good or bad) in the past year and he had started running the stairs in the hotel, which he did the morning of the event. He described his walk prior to exercising as "lumbering," as his height was 6 feet 6 inches. However, since he began running he did not "lumber" anymore.

He considered his financial situation as "very good" and had been on the "big airplane" for two years. He further stated that even though his wife did not work, their financial situation had improved.

There had been no changes personally (good or bad) in the previous 12 months, that he would classify as detrimental.

When asked how he would rate his health, he classified it as a "ten out of ten."

He did have the requirement to wear corrective lenses and he was wearing them at the time of the accident. He further stated that he only wore glasses now. He had no issue with his hearing or his color vision.

He did take prescription medication, which were disclosed on his FAA medical application form. He did take his prescription medication on the day of the accident and he did not have any side effects from the prescription medication.

He did drink alcohol and could not remember the date he last had a drink but thought it was about a week prior and it may have been a gin and tonic. He did not drink while on trips.

He did not use tobacco products and he did not use illicit drugs.

He commuted from Tampa, Florida, and had been commuting since 1997. He had commuted from Tampa to Miami on the first day of the trip, which he further stated was about an hour in length.

When asked if there were any changes he would like to be implemented at American Airlines, he stated that there were none. He thought American had an "outstanding" workforce. He went on to say that training at American Airlines was "almost like a blank check." He felt it provided "outstanding" training for all of the pilots and the company gave pilots everything they could possibly need.

He further stated that he felt the cabin crew performed with "super human activity" and further stated that they did a "fantastic job." He would fly with them again and would hope to have that staff with him in the event of another emergency.

He had nothing else to add to the interview.

The interview ended at 1413 EDT.